Malignant Lymphoma in a Ferret

Matti Kiupel
Signalment

An 8-months old male ferret from a ferret rescue shelter was submitted dead for necropsy to the Animal Health Diagnostic Laboratory at Michigan State University.
Gross Lesions

- **Emaciation**
- **Enlargement of the cranial cervical, retropharyngeal and mandibular lymph nodes**
- Affected lymph nodes were approximately 5 times normal size, white, firm and homogeneous on cross section.
- Pale liver with multifocal randomly distributed white foci (1 to 2 mm in diameter)
- Splenomegaly, congestion and multifocal white nodules (3 to 5 mm in diameter)
Morphological Diagnosis

- Lymph node, diffuse lymphocytic (small cell) lymphoma
- Liver, periportal lymphocytic (small cell) lymphoma
- Spleen, multifocal lymphocytic (small cell) lymphoma
Immunohistochemistry

- negative for CD79a, Bla.36 and lambda light chains
- diffusely positive for CD3

Result: T-cell lymphoma
Malignant Lymphoma in Ferrets

Most common malignant neoplasm of ferrets

Three variants: adult or lymphocytic form
- most common, in older ferrets
- peripheral lymphadenopathy, subsequent visceral spread
- mature, well-differentiated lymphocytes

juvenile or lymphoblastic form
- in ferrets less than 2 years of age
- thymic masses and early visceral neoplasms
- little to no lymph node replacement
- large, blastic lymphocytes

immunoblastic polymorphous variant
- uncommon
- combines visceral neoplasms and peripheral lymphadenopathy